

## REMARKS

This Amendment is in response to the Office Action mailed March 26, 2007.

In the Office Action, claims 13-16 were rejected under 35 U.S.C. §101 as being allegedly drawn to non-statutory subject matter. Reconsideration and withdrawal of these rejections are respectfully requested, for the following reasons.

Independent claim 13 does not define a data structure, but clearly defined components of a computer-implemented system for evaluating contacts stored in data source. As such, the Office's reliance upon MPEP §2106.01 is misplaced and in error. Indeed, rather than a data structure *per se* that is not capable of causing functional change in a computer (which would rightly invoke MPEP §2106.01), claim 13 recites components of a computer-implemented system. Such a computer-implemented system is defined to include:

- a) **a user interface component configured to allow one or more users to define a data format; define a plurality of rules that operate on, and are intended to assess a quality of, data formatted according to the data format; and map data identifying a plurality of contacts from the data source to the data format, and**
- b) **a rules engine component configured to execute the plurality of rules on the mapped data to produce a set of analyzed data that allows evaluation of potential contacts according to an assessed quality of the data and to provide at least a portion of the analyzed data set to the one or more users.**

Such components clearly define “structural and functional interrelationships” which permit the computer-implemented system's function (to evaluate contacts stored in data source and to provide at least a portion of the analyzed data set to the one or more users) to be realized, to paraphrase the text of MPEP 2106.01. For similar reasons, claim 13 does not define a computer program, as the recited components define structural and functional interrelationships that allow the computer-implemented system's functions to be realized. Lastly, claims 13-16 do

not define descriptive material *per se*, but include recitations of the structure, function and interrelationships of the constituent components of the computer-implemented system. Moreover, claim 13 has been amended to include a positive recitation of a step of providing all or a portion of the analyzed data set to the user(s), which is a real-world concrete manifestation of the functionality of the recited components of the computer-implemented system. Reconsideration and withdrawal of the 35 U.S.C. §101 rejections are, therefore, respectfully requested.

Claims 1-3, 5, 9, 12 and 13 were rejected under 35 U.S.C. §103(a) as being obvious over GuardianIQ 1.0 and Anand et al. Reconsideration and withdrawal of these rejections are respectfully requested.

#### **I. Independent Claim 1**

Independent claim 1 requires:

**allowing a user to define a data format;  
allowing a user to define a plurality of rules that operate on data  
formatted according to the data format, wherein the rules are intended to  
assess a quality of data;**

In the outstanding Office Action, the Office asserts that GuardianIQ teaches these steps at Col. 1, paragraph [001]. However, it is respectfully submitted that such is not the case. Indeed, GuardianIQ's Col. 1 specifically teaches that the user specifies a data set:

*Overview*  
**GuardianIQ is a development environment for defining data quality and business rule logic at a high level with automated application generation capabilities. The user  
→ specifies data sets for which rules drawn from a  
→ knowledge-oriented set of rule classes are to be applied.  
GuardianIQ will automatically generate application code (currently SQL queries or Java class objects) for data  
Validation**

**GuardianIQ allows the abstraction of high-level business logic as a way to archive and manage this logic as strategic enterprise knowledge. Because of GuardianIQ's multiple-target code generation capabilities, a single rule set definition can be used for multiple data validation applications, all of which incorporate and apply *the same synchronized set of rules.***

Specifying a data set does not meet the *metes and bounds* of the claim. Claim 1 calls for the user to define a data format. See paragraphs, 19, 27, 40 and 42 (for example) of the specification for a detailed description of the recited data format. As set forth in the specification, a “data format includes a sequence of named attributes. For example, a particular schema may include a first and last name and an email address of a customer. Once the attributes of the schema are defined, data of that schema (or data of the defined data format) can be retrieved from the data source.” A sample data format is discussed in Col. 40:

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[0001] Each data format definition, which is stored as an XML file
in the database layer, has a name, data store and description associated
with it. An example of an XML data definition file is listed below:
<data name="Lead Data" datastore="..." description="CSV file
leads data">
  <attributes>
    <attribute name="CUSTOMER_NAME"/>
    <attribute name="ADDRESS1"/>
    ....
  </attributes>
  <maps>
    <mapto internalname="ADDRESS" externalname="ADDRESS1"/>
  </maps>
</data>
```

Therefore, it is clear that GuardianIQ's disclosure of the user specifying a “data set” does not meet the claimed recitation of the user defining a data format.

Continuing, claim 1 requires allowing a user to define a plurality of rules that operate on data formatted according to the data format, wherein the rules are intended to assess a quality of data. This recitation requires: a) data; b) formatting data according to the defined data format; and

c) defining a plurality of rules to operate on the data formatted according to the data format. In the outstanding Office Action, the Office stated that “*Column 1 Paragraph [001], discloses that after the user specifies data sets then rules specific to that data sets are drawn from a set of rules, this rules are used to define data quality.*” However, such is not the case.

GuardianIQ does not disclose that “rules specific to that data sets are drawn from a set of rules.” Instead, GuardianIQ teaches that rules drawn from a knowledge-oriented set of rule classes are to be applied to the user-specified data sets. GuardianIQ does not teach or suggest that the rules that are drawn from the knowledge-oriented set of rule classes are specific to the data sets specified to the user. It is respectfully submitted that the Office has read into GuardianIQ more than is disclosed (or indeed suggested) therein.

Moreover, claim 1 includes a step of allowing the user to define a plurality of rules that operate on data formatted according to the data format. The GuardianIQ document does not teach or suggest that the user defines (or is allowed to has the ability to define) a plurality of rules, and much less to define a plurality of rules that operate on data formatted according to the previously user-defined data format. In GuardianIQ, the rules are not disclosed to be user-defined, but “drawn from a knowledge-oriented set of rule classes.” Again, it appears that the Office may be reading into GuardianIQ more than is actually disclosed therein or suggested thereby. In addition, there is no teaching or suggestion in GuardianIQ that the “rules drawn from a knowledge-oriented set of rule classes” are in any way configured to operate on data formatted according to the data format, as required by claim 1. In this regard, all that this bulleted sales brochure discloses is that the user specifies data sets and that rules from a knowledge-oriented set of rules classes are applied to the user-specified data sets. No teaching, mention or suggestion of the format of the data is contained

in this reference, as would be required for this reference to render the claim obvious, whether considered alone or in combination with the Anand et al. secondary reference.

Indeed, the Office acknowledges that the primary reference does not appear to teach:

**mapping data identifying a plurality of contacts from the data source to the data format; and**

and points to Anand et al. for such a teaching, at Col. 2, reproduced herein below for the Examiner's convenience:

**2**

A system and method for generating a report for a user which allows the user to make decisions, without requiring the user to understand or interpret data itself. A database management program executed by a server within a system  
5 for generating the report for the user includes a first subsystem for translating user requests for data, for generating dimensional queries for retrieving data from a database, and for processing user modifications to data types used in generating the report. A second subsystem coupled to the  
10 first subsystem reads data from the database, creates the data types, creates a mapping of the data types to the data, uses the mapping to translate user-initiated dimensional queries received from the first subsystem into Structured Query Language (SQL), and returns query results to the first  
15 subsystem. A third subsystem creates the report at a predetermined time.

As shown, Anand et al. does teach that the second subsystem “creates the data types” and “creates a mapping of the data types to the data.” In contrast, claim 1 requires that data identifying a plurality of contacts be mapped from the data source to the user-defined data format. Therefore, neither GuardianIQ nor Anand et al., whether considered alone or in combination, teach or suggest steps of mapping data identifying a plurality of contacts from the data source to the user-defined data format and executing the plurality of user-defined rules on the mapped data to produce a set of analyzed data that allows evaluation of potential contacts according to an assessed quality of the data, as required by claim 1. Recall that the user-defined rules of claim 1 are recited to

operate on data formatted according to the user-defined data format. Therefore, the combination of GuardianIQ and Anand et al. cannot be said to teach or to suggest the method of claim 1.

## II. Independent Claim 9

Claim 9 requires

**allowing a user to define a data format;  
allowing a user to define a plurality of rules that operate on data formatted according to the data format, wherein the rules are intended to assess a quality of data and include spatial rules, pattern-based rules and electronic validation rules;**

The arguments advanced above relative to claim 1 and the user-defined data format are equally applicable here. Rather than repeat them, they are incorporated herein by reference, as if repeated here in full.

Paragraph [021] of the present application discloses what a spatial rule is:

**Spatial rules operate on data that can be geocoded using a spatial database or on data that can analyzed against geocoded data. For example, a physical address can be verified using a spatial database. Also, a phone number that is associated with the address (e.g., in the same data record) can be calculated to match the address if the geocode of the address is within a specified distance from the geocode of the phone number.**

Pattern-based rules are also explained in paragraph [021]:

**Patterns-based rules are rules that rely upon text patterns to assess the validity of data. For example, rules that look for 10-digit phone numbers, rules that look for an "@" symbol in an email address, and rules that look for vowels in a first or last name, etc.**

Finally, electronic validation rules are detailed in paragraph [023]:

**Electronic validation rules are rules that actively verify critical pieces of information, such as email addresses, domain names, phone numbers, etc. Various testing strategies can be used for electronic validation including intrusive tests, such as sending confirmation emails to an email address and passive tests, such as using an SMTP verify command, using DNS to ensure a domain name is registered and using exchanges to verify phone numbers that are published and not mobile. Phone numbers can be verified by, for example, checking if the number is published in a phone book or phone**

**billing database or by checking if the area code and exchange exist in combination.**

The Office asserts that the claimed recitation “the rules are intended to assess a quality of data and include spatial rules, pattern-based rules” is equivalent to rules based consistency and uniqueness, which is asserted to be taught by GuardianIQ, at column 1, paragraph [002]. However, neither spatial nor pattern-based rules are related to consistency and uniqueness. Spatial rules operate on data that can be geocoded using a spatial database (not rules that are related to consistency and uniqueness) and pattern-based rules are rules that rely on text patterns to assess the validity of the data – again, not related to consistency and (possibly peripherally) uniqueness.

GuardianIQ is also tapped for an alleged teaching of the claimed electronic validation rules. However, there is no teaching or suggestion in GuardianIQ, whether considered alone or in combination of any rules that employ various testing strategies for electronic validation including intrusive tests, such as sending confirmation emails to an email address and passive tests, such as using an SMTP verify command, using DNS to ensure a domain name is registered and using exchanges to verify phone numbers that are published and not mobile. Phone numbers can be verified by, for example, checking if the number is published in a phone book or phone billing database or by checking if the area code and exchange exist in combination. GuardianIQ simply does not teach or suggest any such electronic validation rules, as required by claim 9 – whether considered alone or in combination with Anand et al.

In addition, the Office is urged to appreciate that claim 9 requires

**allowing a user to define a plurality of rules that operate on data formatted according to the data format, wherein the rules are intended to assess a quality of data and include spatial rules, pattern-based rules and electronic validation rules; (Underlining for emphasis only)**

Therefore, the claim requires that the user-defined rules include spatial rules **and** pattern-based rules **and** electronic validation rules. GuardianIQ, whether considered alone or in combination with Anand et al., does not teach or suggest any one of them – i.e., GuardianIQ does not teach or suggest spatial rules, does not teach or suggest pattern-based rules and does not teach or suggest electronic validation rules – and certainly does not teach or suggest that the rules include all three of them, as would be required for the applied combination to render claim 9 obvious.

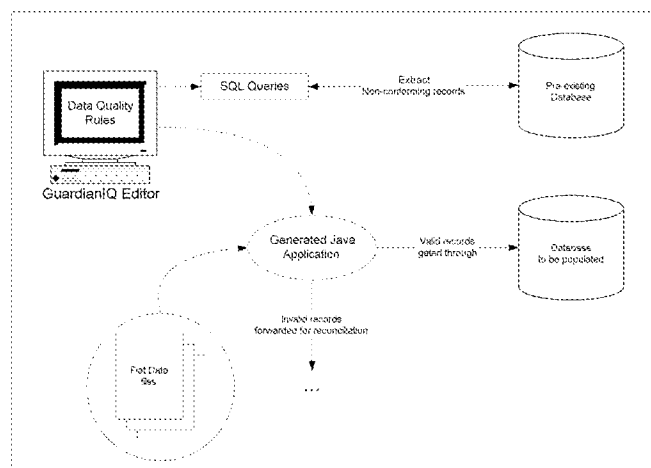
Claim 9, in addition, includes recitations that are similar to recitations in claim 1, and the arguments relative thereto are equally applicable here.

### III. Independent Claim 13

GuardianIQ, whether considered single or in combination with Anand et al. cannot be said to teach or to suggest any manner of user-interface. Indeed, claim 13 requires:

**a user interface component configured to allow one or more users to define a data format; define a plurality of rules that operate on, and are intended to assess a quality of, data formatted according to the data format; and map data identifying a plurality of contacts from the data source to the data format**

GuardianIQ is one page of bulleted feature information and another page that includes a drawing:





This drawing simply does not represent, teach, show, suggest or include a user-interface of any kind, and much less a user interface configured to allow one or more users to define a data format; define a plurality of rules that operate on, and are intended to assess a quality of, data formatted according to the data format; and map data identifying a plurality of contacts from the data source to the data format, as required by the claim.

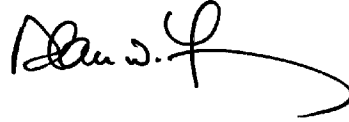
It is respectfully submitted that the Office is not free to ascribe more to the GuardianIQ reference than it objectively teaches or more than it reasonably could be inferred to suggest. In this case, there is no teaching or suggestion of any user interface of any kind, and much less a teaching or a suggestion of a user interface of the kind defined by claim 13.

The arguments advanced above relative to data format and the user-defined rules are also applicable here, as claim 13 recites that the user interface component is configured to allow one or more users to define a data format; define a plurality of rules that operate on, and are intended to assess a quality of, data formatted according to the data format; and map data identifying a plurality of contacts from the data source to the data format. It is respectfully submitted that the Examiner's arguments have failed to establish a prima facie case of obviousness of the claimed embodiments, as not all of the claim limitations are taught or suggested by the cited combination of art. See, e.g., *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974), *In re Wilson*, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970) and a long line of case law since then. As the applied combination does not teach or suggest the claimed embodiments, the 35 U.S.C. §103(a) rejection applied to the independent claims must be reconsidered and withdrawn.

As the rejections to the independent claims are considered to have been overcome, the 35 U.S.C. §103(a) rejections applied to the dependent claims are not discussed herein at this time.

Applicants believe that this application is now in condition for allowance. If any unresolved issues remain, please contact the undersigned attorney of record at the telephone number indicated below and whatever is necessary to resolve such issues will be done at once.

Respectfully submitted,



Date: May 29, 2007

By: \_\_\_\_\_

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